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RAW SEQUENCE LISTING   DATE: 09/26/2002
PATENT APPLICATION: US/10/091,166B   TIME: 14:12:44

                Input Set : A:\97.44D1.subseqlist2.txt
                Output Set: N:\CRF4\09252002\J091166B.raw

 4 <110> APPLICANT: Adler, David A.
 5   Holloway, James L.
 6   Baindur, Nand
 7   Beigel-Orme, Stephanie
 8   Sheppard, Paul O.
10 <120> TITLE OF INVENTION: NOVEL BETA-DEFENSINS
13 <130> FILE REFERENCE: 97-44D1
15 <140> CURRENT APPLICATION NUMBER: US 10/091,166B
16 <141> CURRENT FILING DATE: 2002-03-05
18 <150> PRIOR APPLICATION NUMBER: US 09/636,399
19 <151> PRIOR FILING DATE: 2000-08-10
21 <150> PRIOR APPLICATION NUMBER: US 09/344,097
22 <151> PRIOR FILING DATE: 1999-06-25
24 <150> PRIOR APPLICATION NUMBER: US 09/150,786
25 <151> PRIOR FILING DATE: 1998-09-10
27 <150> PRIOR APPLICATION NUMBER: US 60/064,294
28 <151> PRIOR FILING DATE: 1997-11-05
30 <150> PRIOR APPLICATION NUMBER: US 60/058,335
31 <151> PRIOR FILING DATE: 1997-09-10
33 <160> NUMBER OF SEQ ID NOS: 72
35 <170> SOFTWARE: FastSEQ for Windows Version 4.0
37 <210> SEQ ID NO: 1
38 <211> LENGTH: 219
39 <212> TYPE: DNA
40 <213> ORGANISM: Homo sapiens
42 <220> FEATURE:
43 <221> NAME/KEY: CDS
44 <222> LOCATION: (1)...(195)
46 <400> SEQUENCE: 1
47 atg agg atc cat tat ctt ctg ttt gct ttg ctc ttc ctg ttt ttg gtg   48
48 Met Arg Ile His Tyr Leu Leu Phe Ala Leu Leu Phe Leu Phe Leu Val
49 1   5   10   15
51 cct gtt cca ggt cat gga gga atc ata aac aca tta cag aaa tat tat   96
52 Pro Val Pro Gly His Gly Gly Ile Ile Asn Thr Leu Gln Lys Tyr Tyr
53   20   25   30
55 tgc aga gtc aga ggc ggc cgg tgt gct gtg ctc agc tgc ctt cca aag 144
56 Cys Arg Val Arg Gly Gly Arg Cys Ala Val Leu Ser Cys Leu Pro Lys
57   35   40   45
59 gag gaa cag atc ggc aag tgc tcg acg cgt ggc cga aaa tgc tgc cga 192
60 Glu Glu Gln Ile Gly Lys Cys Ser Thr Arg Gly Arg Lys Cys Cys Arg
61   50   55   60
63 aga aagaaataaa aaccctgaaa catg   219
64 Arg

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```
65  65
68  <210> SEQ ID NO: 2
69  <211> LENGTH: 65
70  <212> TYPE: PRT
71  <213> ORGANISM: Homo sapiens
73  <400> SEQUENCE: 2
74  Met Arg Ile His Tyr Leu Leu Phe Ala Leu Leu Phe Leu Phe Leu Val
75  1               5                   10                  15
76  Pro Val Pro Gly His Gly Gly Ile Ile Asn Thr Leu Gln Lys Tyr Tyr
77              20                  25                  30
78  Cys Arg Val Arg Gly Gly Arg Cys Ala Val Leu Ser Cys Leu Pro Lys
79              35                  40                  45
80  Glu Glu Gln Ile Gly Lys Cys Ser Thr Arg Gly Arg Lys Cys Cys Arg
81      50          ·           55                  60
82  Arg
83  65
86  <210> SEQ ID NO: 3
87  <211> LENGTH: 31
88  <212> TYPE: PRT
89  <213> ORGANISM: Artificial Sequence
91  <220> FEATURE:
92  <221> NAME/KEY: VARIANT
93  <222> LOCATION: (2)...(7)
94  <223> OTHER INFORMATION: Any amino acid, preferably not cysteine.
96  <221> NAME/KEY: VARIANT
97  <222> LOCATION: (9)...(12)
98  <223> OTHER INFORMATION: Any amino acid, preferably not cysteine.
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W--> **100 <221> VARIANT**
```
101 <222> LOCATION: (14)...(20)
102 <223> OTHER INFORMATION: Any amino acid, preferably not cysteine.
```
W--> **104 <221> VARIANT**
```
105 <222> LOCATION: (22)...(22)
106 <223> OTHER INFORMATION: Any amino acid, preferably not cysteine.
```
W--> **108 <221> VARIANT**
```
109 <222> LOCATION: (24)...(29)
110 <223> OTHER INFORMATION: Any amino acid, preferably not cysteine.
112 <223> OTHER INFORMATION: conserved motif
```
W--> **114 <400> 3**
W--> **115 Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa**
```
116 1               5                   10                  15
```
W--> **117 Xaa Xaa Xaa Xaa Gly Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Cys**
```
118             20                  25                  30
121 <210> SEQ ID NO: 4
122 <211> LENGTH: 213
123 <212> TYPE: DNA
124 <213> ORGANISM: Artificial Sequence
126 <220> FEATURE:
127 <223> OTHER INFORMATION: Degenerate nucleotide encoding the polypeptide of
128         SEQ ID NO:2.
```

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Input Set : A:\97.44D1.subseqlist2.txt
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```
W--> 130 <221> NAME/KEY: misc_feature
     131 <222> LOCATION: (1)...(213)
     132 <223> OTHER INFORMATION: n = a, g, c or t
W--> 134 <400> 4
W--> 135 athcaytayy tnytnttygc nytnytntty ytnttyytng tnccngtncc nggncayggn 60
W--> 136 ggnathatha ayacnytnca raartrrnnn tgymgngtnm gnggnggnmg ntgygcngtn 120
W--> 137 ytnwsntgyy tnccnaarga rgarcarath ggnaartgyw snacnmgngg nmgnaartgy 180
W--> 138 tgymgnmgna araartrraa rccntrraay atg                           213
     140 <210> SEQ ID NO: 5
     141 <211> LENGTH: 20
     142 <212> TYPE: DNA
     143 <213> ORGANISM: Artificial Sequence
     145 <220> FEATURE:
     146 <223> OTHER INFORMATION: Oligonucleotide ZC14741
     148 <400> SEQUENCE: 5
     149 gagcacttgc cgatctgttc                                          20
     151 <210> SEQ ID NO: 6
     152 <211> LENGTH: 20
     153 <212> TYPE: DNA
     154 <213> ORGANISM: Artificial Sequence
     156 <220> FEATURE:
     157 <223> OTHER INFORMATION: Oligonucleotide ZC14740
     159 <400> SEQUENCE: 6
     160 ccaggtcatg gaggaatcat                                          20
     162 <210> SEQ ID NO: 7
     163 <211> LENGTH: 18
     164 <212> TYPE: DNA
     165 <213> ORGANISM: Artificial Sequence
     167 <220> FEATURE:
     168 <223> OTHER INFORMATION: Oligonucleotide ZC14780
     170 <400> SEQUENCE: 7
     171 ggaggaatca taaacaca                                            18
     173 <210> SEQ ID NO: 8
     174 <211> LENGTH: 18
     175 <212> TYPE: DNA
     176 <213> ORGANISM: Artificial Sequence
     178 <220> FEATURE:
     179 <223> OTHER INFORMATION: Oligonucleotide ZC14776
     181 <400> SEQUENCE: 8
     182 gccgatctgt tcctcctt                                            18
     184 <210> SEQ ID NO: 9
     185 <211> LENGTH: 438
     186 <212> TYPE: DNA
     187 <213> ORGANISM: Homo sapiens
     189 <220> FEATURE:
     190 <221> NAME/KEY: CDS
     191 <222> LOCATION: (220)...(420)
     193 <400> SEQUENCE: 9
     194 acaaatccat agggagctct gccttaccat tgggttccta attaactgag tgagtgggtg 60
```

```
195 tgttctgcat ggtgagaggc attggaatga tgcatcagaa aacatgtcat aatgtcatca 120
196 ctgtaatatg acaagaattg cagctgtggc tggaaccttt ataaagtgac caagcacacc 180
197 ttttcatcca gtctcagcgt ggggtgaagc ctagcagct atg agg atc cat tat    234
198                                             Met Arg Ile His Tyr
199                                             1               5
201 ctt ctg ttt gct ttg ctc ttc ctg ttt ttg gtg cct gtt cca ggt cat   282
202 Leu Leu Phe Ala Leu Leu Phe Leu Phe Leu Val Pro Val Pro Gly His
203               10               15                  20
205 gga gga atc ata aac aca tta cag aaa tat tat tgc aga gtc aga ggc   330
206 Gly Gly Ile Ile Asn Thr Leu Gln Lys Tyr Tyr Cys Arg Val Arg Gly
207               25               30                  35
209 ggc cgg tgt gct gtg ctc agc tgc ctt cca aag gag gaa cag atc ggc   378
210 Gly Arg Cys Ala Val Leu Ser Cys Leu Pro Lys Glu Glu Gln Ile Gly
211           40               45               50
213 aag tgc tcg acg cgt ggc cga aaa tgc tgc cga aga aag aaa           420
214 Lys Cys Ser Thr Arg Gly Arg Lys Cys Cys Arg Arg Lys Lys
215       55               60               65
217 taaaaaccct gaaacatg                                               438
219 <210> SEQ ID NO: 10
220 <211> LENGTH: 67
221 <212> TYPE: PRT
222 <213> ORGANISM: Homo sapiens
224 <400> SEQUENCE: 10
225 Met Arg Ile His Tyr Leu Leu Phe Ala Leu Leu Phe Leu Phe Leu Val
226 1               5                   10                  15
227 Pro Val Pro Gly His Gly Gly Ile Ile Asn Thr Leu Gln Lys Tyr Tyr
228           20               25                  30
229 Cys Arg Val Arg Gly Gly Arg Cys Ala Val Leu Ser Cys Leu Pro Lys
230           35               40               45
231 Glu Glu Gln Ile Gly Lys Cys Ser Thr Arg Gly Arg Lys Cys Cys Arg
232       50               55               60
233 Arg Lys Lys
234 65
237 <210> SEQ ID NO: 11
238 <211> LENGTH: 219
239 <212> TYPE: DNA
240 <213> ORGANISM: Artificial Sequence
242 <220> FEATURE:
243 <223> OTHER INFORMATION: Degenerate nucleotide sequence encoding the
244         polypeptide of SEQ ID NO:10.
246 <221> NAME/KEY: misc_feature
247 <222> LOCATION: (1)...(219)
248 <223> OTHER INFORMATION: n = a, g, c or t
250 <400> 11
251 atgmgnathc aytayytnyt nttygcnytn ytnttyytnt tyytngtncc ngtnccnggn 60
252 cayggnggna thathaayac nytncaraar trrnnntgym gngtnmgngg nggnmgntgy 120
253 gcngtnytnw sntgyytncc naargargar carathggna artgywsnac nmgnggnmgn 180
254 aartgytgym gnmgnaaraa rtrraarccn trraayatg                        219
256 <210> SEQ ID NO: 12
```

W--> 246
W--> 250
W--> 251
W--> 252
W--> 253
W--> 254

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Input Set : A:\97.44D1.subseqlist2.txt
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    257 <211> LENGTH: 21
    258 <212> TYPE: DNA
    259 <213> ORGANISM: Artificial Sequence
    261 <220> FEATURE:
    262 <223> OTHER INFORMATION: Oligonucleotide ZC15591
    264 <400> SEQUENCE: 12
    265 tgccgatctg ttcctccttt g   21
    267 <210> SEQ ID NO: 13
    268 <211> LENGTH: 25
    269 <212> TYPE: DNA
    270 <213> ORGANISM: Artificial Sequence
    272 <220> FEATURE:
    273 <223> OTHER INFORMATION: Oligonucleotide ZC15589
    275 <400> SEQUENCE: 13
    276 gaacaggcac caaaaacagg aagag   25
    278 <210> SEQ ID NO: 14
    279 <211> LENGTH: 37
    280 <212> TYPE: PRT
    281 <213> ORGANISM: Artificial Sequence
    283 <220> FEATURE:
    284 <223> OTHER INFORMATION: Defensin polypeptide
    286 <400> SEQUENCE: 14
    287 Gln Lys Tyr Tyr Cys Arg Val Arg Tyr Tyr Arg Cys Ala Val Leu Ser
    288 1   5   10   15
    289 Cys Leu Pro Lys Glu Glu Gln Ile Tyr Lys Cys Ser Thr Arg Tyr Arg
    290   20   25   30
    291 Lys Cys Cys Arg Arg
    292   35
    295 <210> SEQ ID NO: 15
    296 <211> LENGTH: 29
    297 <212> TYPE: PRT
    298 <213> ORGANISM: Artificial Sequence
    300 <220> FEATURE:
    301 <223> OTHER INFORMATION: Defensin polypeptide
W--> 303 <221> NAME/KEY: VARIANT
    304 <222> LOCATION: (26)...(26)
    305 <223> OTHER INFORMATION: leucine, isoleucine, valine, phenylalanine, or
    306   methionine
W--> 308 <400> 15
    309 Gly Arg Cys Ala Val Leu Ser Cys Leu Pro Lys Glu Glu Cys Ile Gly
    310 1   5   10   15
W--> 311 Lys Met Ser Thr Arg Gly Arg Lys Cys Xaa Arg Arg Lys
    312   20   25
    315 <210> SEQ ID NO: 16
    316 <211> LENGTH: 30
    317 <212> TYPE: PRT
    318 <213> ORGANISM: Artificial Sequence
    320 <220> FEATURE:
    321 <223> OTHER INFORMATION: Defensin polypeptide

```
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            Input Set : A:\97.44D1.subseqlist2.txt
            Output Set: N:\CRF4\09252002\J091166B.raw
```

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:3;  Xaa Pos. 2,3,4,5,6,7,9,10,11,12,14,15,16,17,18,19,20,22,24,25,26,27
Seq#:3;  Xaa Pos. 28,29
Seq#:4;  N Pos. 12,15,21,24,27,33,39,42,45,48,51,54,60,63,75,78,88,89,90,96
Seq#:4;  N Pos. 99,102,105,108,111,117,120,123,126,132,135,153,162,165,168
Seq#:4;  N Pos. 171,174,186,189,204
Seq#:11; N Pos. 6,18,21,27,30,33,39,45,48,51,54,57,60,66,69,81,84,94,95,96
Seq#:11; N Pos. 102,105,108,111,114,117,123,126,129,132,138,141,159,168,171
Seq#:11; N Pos. 174,177,180,192,195,210
Seq#:15; Xaa Pos. 26
Seq#:16; Xaa Pos. 26
Seq#:17; Xaa Pos. 26
Seq#:35; Xaa Pos. 45
Seq#:36; Xaa Pos. 45
Seq#:37; Xaa Pos. 44
Seq#:38; Xaa Pos. 44
Seq#:39; Xaa Pos. 43
Seq#:40; Xaa Pos. 43
Seq#:41; Xaa Pos. 42
Seq#:42; Xaa Pos. 42
Seq#:43; Xaa Pos. 41
Seq#:44; Xaa Pos. 41
Seq#:45; Xaa Pos. 40
Seq#:46; Xaa Pos. 40
Seq#:47; Xaa Pos. 39
Seq#:48; Xaa Pos. 39
Seq#:49; Xaa Pos. 38
Seq#:50; Xaa Pos. 38
Seq#:51; Xaa Pos. 37
Seq#:52; Xaa Pos. 37
Seq#:53; Xaa Pos. 36
Seq#:54; Xaa Pos. 36
Seq#:55; Xaa Pos. 35
Seq#:56; Xaa Pos. 35
Seq#:57; Xaa Pos. 34
Seq#:58; Xaa Pos. 34
Seq#:59; Xaa Pos. 33
Seq#:60; Xaa Pos. 33
Seq#:61; Xaa Pos. 32
Seq#:62; Xaa Pos. 32
Seq#:63; Xaa Pos. 31
Seq#:64; Xaa Pos. 31
Seq#:65; Xaa Pos. 30
Seq#:66; Xaa Pos. 30
Seq#:67; Xaa Pos. 29
```

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Seq#:68; Xaa Pos. 29
Seq#:69; Xaa Pos. 28
Seq#:70; Xaa Pos. 28
Seq#:71; Xaa Pos. 27
Seq#:72; Xaa Pos. 27

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Input Set : A:\97.44D1.subseqlist2.txt
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```
L:100 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:104 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:108 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:114 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:117 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:16
L:130 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:134 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:136 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:60
L:137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:120
L:138 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:180
L:246 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:250 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:11
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:60
L:253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:120
L:254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:180
L:303 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:308 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:15
L:311 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:16
L:323 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:328 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16
L:331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:16
L:343 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:348 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:17
L:351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:16
L:652 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:657 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35
L:662 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:32
L:676 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:681 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:36
L:686 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:32
L:698 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:703 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:37
L:708 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:32
L:720 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:725 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:38
L:730 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:32
L:742 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:747 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:39
L:752 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:32
L:764 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:769 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:40
L:774 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:32
L:786 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:791 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:41
L:796 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:32
```

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L:808 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:813 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:42
L:818 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:32
L:830 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:835 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:43
L:840 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:32
L:852 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:857 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:44
L:862 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:32
L:874 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:879 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:45
L:884 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:32
L:896 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:901 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:46
L:906 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:32
L:918 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:923 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:47
L:928 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:32
L:940 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:945 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:48
L:950 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:32
L:962 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:967 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:49
L:972 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:32
L:984 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:989 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:50
L:994 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:32
L:1006 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1011 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:51
L:1016 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:32
L:1028 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1033 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:52
L:1038 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:32
L:1050 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1055 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:53
L:1060 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:32
L:1072 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1077 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:54
L:1082 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:32
L:1094 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1099 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:55
L:1104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:32
L:1116 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1121 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:56
L:1126 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:32
L:1138 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1143 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:57
L:1148 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:32
L:1160 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
```

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PATENT APPLICATION: US/10/091,166B   TIME: 14:12:45

Input Set : **A:\97.44D1.subseqlist2.txt**
Output Set: **N:\CRF4\09252002\J091166B.raw**

L:1165 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:58
L:1170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:32
L:1182 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1187 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:59
L:1192 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:32
L:1204 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1209 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:60
L:1214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:32
L:1226 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1231 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:61
L:1234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:16
L:1248 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1253 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:62
L:1256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:16
L:1270 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1275 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:63
L:1278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:16
L:1292 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1297 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:64
L:1300 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:16
L:1314 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1319 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:65
L:1322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:16
L:1336 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1341 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:66
L:1344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:16
L:1358 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1363 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:67
L:1366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67 after pos.:16
L:1380 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1385 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:68
L:1388 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68 after pos.:16
L:1400 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1405 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:69
L:1408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:16
L:1420 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1425 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:70
L:1428 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:16
L:1440 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1445 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:71
L:1448 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:16
L:1460 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1465 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:72